# DESCRIPTIONS OF NEW SPECIES OF HELICOIDS FROM THE INDIAN REGION.

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HAVING been entrusted with the task of compiling the next volume of Land Mollusca for the Fauna of British India, I have had occasion to examine various public and private collections. In the course of this examination some shells proved to have been wrongly identified and to pertain to undescribed forms. A number of shells of Plectopylis, forming part of the Godwin-Austen Collection in the British Museum, and handed to me for identification, also comprised three specimens of an unknown species.

The object of the present paper is to publish the descriptions of these, which will ultimately be incorporated with the Fauna of

British India.

#### PHILALANKA QUINQUELIRATA, n.sp.

Shell dextral, pyramidal, narrowly perforate, pale yellowish-corneous, semi-translucent, covered with a deciduous cuticle; finely and closely striated, the striæ being flexuous on the base, where there are also traces of excessively minute spirals. Spire convex, apex obtuse, suture deep. Whorls 6, tumid above, inflated below, increasing slowly and regularly, with five fine spiral liræ, one at the periphery, the other four between it and the suture; the last whorl not descending in front. Aperture nearly vertical, semi-lunate; peristome thin, the lower margin slightly, the columellar margin strongly reflected, and partly overhanging the narrow perforation. Diam. 5-25, alt. 4.25 mm.

Hab.—India: Anamullay Hills (Beddome).

Type in the British Museum, presented by Mr. J. H. Ponsonby.



Five specimens, labelled tricarinata, Blanford, received by Mr. Ponsonby from the late Colonel Beddome, proved upon examination to be quite distinct, and as they also differ from all other known forms I venture to base a new species upon them. My own collection contains two specimens from the same source.

Philalanka quinquelirata is much larger than P. tricarinata, which measures less than 2 mm., and possesses, moreover, only three revolving lire, the lowest of which is below the periphery, whereas in the new species it is peripheral. The perforation of P. tricarinata is proportionately wider, and the columellar margin is not reflected, whilst the aperture is higher in proportion to its width than is the case in P. quinquelirata.

#### THYSANOTA FLAVIDA, n.sp.

Shell narrowly umbilicate, depressed trochiform, finely plicate-striate, pale yellowish-corneous; spire sub-convex, suture impressed, apex obtuse. Whorls 6½, increasing slowly and regularly, convex above and below, carinated, the carina exserted, except in the protoconch, with a raised spiral thread a short distance above the carina, and densely crowded with impressed spiral lines, more distinct on the under than on the upper side; the carina and spiral thread fringed with deciduous coarse cuticular processes, resembling flattened hairs. Aperture oblique, securiform; peristome acute, the outer margin sub-convex, basal arcuate, columellar almost vertical, slightly dilated. Diam. maj. 12, min. 11.5 mm.; alt. 7 mm.



Hab. - India: Nilgiries (Beddome).

Type in my collection.

A specimen received from the late Colonel Beddome as *T. crinigera* proved upon examination to differ from that species in being more convex, and more elevated in the spire, in the whorls being more convex and in the narrow umbilicus; the keel is also more exserted, while the plicate transverse striæ are much less pronounced, those in *crinigera* being almost lamellate. Mr. Ponsonby possesses two immature specimens, which I refer to the new species. They were likewise received from Colonel Beddome as *crinigera*, and, although labelled only South India, are probably from the same locality.

## PLECTOPYLIS (CHERSÆCIA) KENGTUNGENSIS, n.sp.

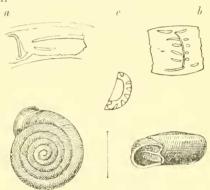
Shell sinistral, widely umbilicated, discoid, corneous. Whorls 6‡, narrow, increasing slowly and regularly, somewhat flattened above, rounded below, the last abruptly and shortly descending in front, and slightly dilated at the mouth. Spire a little raised, suture impressed. Aperture obovate, peristome slightly thickened and reflected; upper margin nearly straight, outer rounded, columellar ascending; parietal callus with a raised flexuous ridge slightly notched at the junctions above and below.

Parietal armature (Fig. b) composed of a vertical plate, deflected posteriorly above, with a short obliquely ascending ridge below, projecting on both sides; a long horizontal fold rises a short distance from the vertical plate, running parallel with the whorl and joining the raised ridge at the aperture; below this occurs a second, but very short fold, 2 mm. long, also rising close to the vertical plate, and in a line with its lower extremity; below the vertical plate runs a third, but very thin and slight horizontal fold close to the lower suture, and joining the ridge at the aperture. The palatal armature

(Fig. a) consists of: first a thin bilobed horizontal fold near the upper suture; next, two horizontal rather thin elevated folds, followed by two stouter and rather less elevated folds, obliquely ascending towards the mouth; and lastly, a thin horizontal fold near the lower suture, longer than the others and gradually attenuated anteriorly; all, except the first fold, are provided posteriorly with a slight denticle, while a low transverse ridge unites their posterior terminations. Fig. e gives the posterior view of the parietal and palatal barriers. Diam. maj. 12, min. 10 mm.; alt. 4.75 mm.

Hab.—E. Burma: Kengtung (Woodthorpe).

Type in the British Museum, presented by Lient.-Col. H. H. Godwin-Austen.



Three specimens in the Godwin-Austen Collection, British Museum, were found upon examination to be closely allied to *P. nagaensis*, G.-A. The new species, however, is more depressed, and lacks the spiral sculpture of its ally, which also has the barriers placed nearer the aperture, and the third, fourth, and fifth palatal folds more oblique, while *kengtungensis* possesses a short horizontal median fold which is absent in *nagaensis*. It also resembles *P. muspratti*, Gude, in having the palatal folds united posteriorly by a low ridge and in having the barriers at the same distance from the aperture, but in the latter species the palatal folds are much shorter and stouter, and it lacks the long horizontal parietal fold as well as the short median fold, being only provided with a short fold at the aperture.

## Chloritis (Trichochloritis) leithi, n.sp.

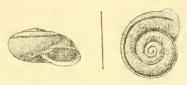
Shell rather widely umbilicated, depressed-conoid, thin, transparent, corneous, with a narrow chestnut supra-peripheral band, finely plicate-striate, somewhat sparsely covered with soft hairs placed in pits and arranged in quincunx. Spire low, apex sunken, suture deep. Whorls 4, convex above, tumid below, increasing rapidly, the last exceeding in width the total of the other three, dilated at the mouth, not constricted behind the peristome, shortly but deeply descending in front, sub-angulated around the umbilicus, which is rather wide

at first, showing the greater part of the penultimate whorl, when it suddenly contracts, leaving only a very narrow perforation. Aperture sub-circular, margins approaching; peristome scarcely thickened. expanded, but not reflexed; the columellar margin triangularly dilated and slightly overhanging the umbilicus. Diam. maj. 14.5, min. 11.5 mm.; alt. 7 mm.

Hab.—India: Bombay (Dr. Leith).

Type in the British Museum. The type was labelled 'H. helferi', but upon comparison with Benson's type, kindly lent to me for the purpose by Dr. L. Doncaster, of the University Museum of Zoology, Cambridge, I was able to satisfy myself that it was quite distinct.

From that Andaman species, it differs in being much thinner in texture, in having the hairs, which are larger and softer, much



more crowded, and in being coiled differently, as it has the last whorl proportionately wider. It also bears some superficial resemblance to *Chloritis propinqua*, but that species is a much stouter shell, with a more elevated spire, while in *C. leithi* the nubilicus, although wider at first, becomes more contracted. Two other specimens in the Museum, also from Bombay and received from Dr. Leith, are like the type, but they are slightly damaged. Mr. Ponsonby possesses a specimen which, like the Museum shells, was labelled *H. helferi*. It is a trifle smaller than the type, measuring 14: 10.75: 6.75 mm., and is labelled Unjunera. I have been unable to trace any such locality, the nearest approach to it being Aujar, a district of Cutch, likewise, therefore, in the Bombay Presidency.

## Chloritis (Trichochloritis) theobaldi, n.sp.

Shell moderately umbilicated, depressed-conoid, pale corneous, with a very faint supra-peripheral band, finely striated transversely, and densely covered with hair-sears arranged in quincunx. Spire conoid, apex prominent, suture rather deep. Whorls 5½, convex, increasing slowly and regularly, the last widening towards the mouth, not constricted behind the peristome, slightly angulated at the periphery at first, the angulation disappearing near the mouth; angulated around the deep umbilicus, which shows nearly the whole of the penultimate whorl. Aperture sub-circular, margins distant, united by a thin sinuous callus on the parietal whorl; peristome white, thickened and shortly reflexed; margins regularly curved, columellar ascending, triangularly dilated, and slightly overhanging the umbilicus. Diam. maj. 24.5, min. 21 mm.; alt. 16 mm. Aperture: width 10, height 9.5 mm.

Hab.—Shan States.

Type in the British Museum.

This new species is based on a specimen found with *C. anserina* in the Theobald Collection of the British Museum. It differs from that species in having a more conical spire and a wider umbilicus, the base is less inflated, and consequently the aperture is more dilated laterally. It is also differently coiled, for, while measuring one-fifth less in diameter, it possesses half a whorl more, and the hair-scars, moreover, are much finer and more crowded, while the presence of a supraperipheral band unfortunately omitted in the above figure still further differentiates it from *C. anserina*.





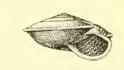
C. theobaldi bears a striking resemblance to C. franciscanorum, Gredler, a Chinese shell, but it has the umbilicus a little more contracted, the spire is relatively higher, and the aperture is less dilated laterally, while the columellar margin ascends less obliquely; the hair-sears are also finer.

I have much pleasure in associating the late Mr. W. Theobald's name with this new species.

### PLECTOTROPIS NUTANS, n.sp.

Shell depressed-conoid, rather widely and perspectively umbilicated, thin, light corneous under a pale-yellowish corneous deciduous cuticle, finely and somewhat irregularly striated, very minutely spirally striated above, the base covered with much coarser incised, slightly wary spirals. Spire low, suture linear, apex acute. Whorls  $5\frac{1}{4}-5\frac{1}{2}$ , increasing slowly and regularly at first, the last rather suddenly; flattened above, the last convex below, keeled at the periphery, the





keel being rather pinched above and below, angulated around the umbilicus, not dilated at the mouth, very shortly and slightly descending in front. Aperture oblique, sub-hastate, margins approaching, united by a very thin callus on the parietal wall; peristome rather thin, scarcely thickened, but distinctly expanded, slightly reflexed; upper margin slightly curved, forming an obtuse angle with the outer margin, which is also slightly curved, the basal margin strongly

curved, slightly angulated at the junction with the columellar margin, which is almost straight, ascending obliquely, triangularly dilated, but not overhanging the umbilieus. Diam. maj. 16.5-17, min. 14-14.5 mm.; alt. 8 mm.

Hab.—India: Habiang, Garo Hills, Assam (Blanford); also West

Khasia, Assam.

Type in the British Museum, presented by the late Dr. W. T. Blanford.

In shape the new species somewhat resembles the var. theobaldi of P. taneina, but the shell is much thinner, the whorls are more flattened above and less tumid below, the keel is more pronounced and pinched, and the aperture quite different. The principal character, however, separating it from P. tapeina and its varieties lies in the absence of cuticular granules or squame and in the deciduous cuticle. I found specimens in Mr. Leman's collection and in the British Museum -both the Blanford and the general collection-with the MS. name Trachia nutans, Blf. The specimen in the general collection of the British Museum is a trifle larger, measuring 18 mm. in diameter, and more solid, while the last whorl descends for a considerable distance. Mr. Ponsonby possesses two specimens, received from Lieut.-Colonel Godwin-Austen, labelled "Habiang, Garo". One of these measures 18 mm. in diameter and has the aperture more dilated and the basal and columellar margin more curved than the other specimens I have seen.